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Tao Chen

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EXAMINER

HOLLIDAY, JAIME MICHELE

ART UNIT

PAPER NUMBER

2617

NOTIFICATION DATE

DELIVERY MODE

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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com

Office Action Summary	Application No.	Applicant(s)	
	09/587,668	CHEN, TAO	
	Examiner	Art Unit	
	JAIME M. HOLLIDAY	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 17, 2010 has been entered.

Response to Arguments

2. Applicant's arguments with respect to **claims 29-31, 33-35 and 37-47** have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

3. **Claim 44** is objected to because of the following informalities: Claim 44 is dependent on claim 44. For prosecution purposes, Examiner will examine claim 44 as dependent on claim 41. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. **Claims 29-31, 33-35 and 37-39** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Chheda et al. (US 6,515,975 B1)** in view of **Nanda et al. (US 6,571,104 B1)**, and in further view of **Moon (US 6,567,391 B1)**.

Consider **claim 29**, Chheda et al. clearly show and disclose a method comprising: detecting an unbalanced quality of power control signals from a wireless device simultaneously received at a plurality of base station transceivers involved in a soft handover, wherein the unbalanced quality is determined based on qualities of power control signals from each of the plurality of base station transceivers involved in the soft handoff (BTS sending forward link signals to MS and receiving power control channel signals; each of the BTSs sends the bit energy to noise density estimate and current transmit power to a central location such as BSC; if any output powers incremental difference are found to exceed a predetermined threshold, these BTSs are instructed to use power output of the BTS(x) (the best) [col. 1 lines 15-28, col. 2 lines 37-53, col. 4 line 60- col. 5 line 33]).

However, Chheda et al. fail to specifically disclose that the SNR of a pilot channel is increased.

In the same field of endeavor, Nanda et al. clearly show and disclose increasing a target signal-to-noise ratio (SNR) of a reverse link pilot channel carrying at least one of the power control signals for at least one of the plurality of base station transceivers

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when the quality of the at least one of the power control signals for the at least one of the plurality of base station transceivers is below a predefined target signal quality (If effective $E_{sub.b}/N_{sub.0}$ is smaller than model targeted $E_{sub.b}/N_{sub.0}$, targeted $E_{sub.b}/N_{sub.0}$ is increased by one up step size; When $pcg_{E_{sub.b}/N_{sub.0}}$ 490 is smaller than targeted $E_{sub.b}/N_{sub.0}$, mobile terminal sends a power-control bit on reverse link indicating that base station should increase the power of forward link [fig. 4, col. 8 line 35- col. 9 line 15]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to increase the energy to noise density based on the measured signal from the base station as taught by Nanda et al. in the method of Chheda et al., in order to implement power control during a soft handoff.

However, Chheda et al., as modified by Nanda et al., fail to increase the transmit power level of the pilot channel from the wireless device decrease a power gain of other channels.

In the same field of endeavor, Moon clearly shows and discloses increasing a pilot channel transmit power level of the pilot channel transmitted by the wireless device during a handoff in response to the at least one of the plurality of base station transceivers (mobile station increases transmission power [fig. 2, col. 3 lines 46-65, col. 6 lines 6-14]); and decreasing a power gain of other channels transmitted by the wireless device in relation to the increased transmit power level of the pilot channel of the wireless device during the handoff (total transmission power is not changed; with

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some traffic channels decreasing transmission power [fig. 2, col. 3 lines 46-65, col. 6 lines 6-14]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to decreasing a power gain of other channels while increasing the power of the reverse pilot signal as taught by Moon in the method of Chheda et al., as modified by Nanda et al., in order to implement power control during a soft handoff.

Consider **claim 30**, the combination of Chheda et al. and Nanda et al., as modified by Moon, clearly shows and discloses the claimed invention **as applied to claim 29 above**, and in addition, Moon further discloses the power gain of other channels in relation to the pilot channel is decreased by an amount that is equal to an amount by which the pilot channel transmit power level is increased (the mobile station increases transmission power of the pilot channel by ΔP ; it is also possible to assign the total transmission power of the mobile station to the pilot channel [col. 3 lines 46-65]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to decreasing a power gain of other channels while increasing the power of the reverse pilot signal as taught by Moon in the method of Chheda et al., as modified by Nanda et al., in order to implement power control during a soft handoff.

Consider **claim 31**, the combination of Chheda et al. and Nanda et al., as modified by Moon, clearly shows and discloses the claimed invention **as applied to claim 29 above**, and in addition, Moon further discloses the power gain of other

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channels in relation to the pilot channel is decreased by an amount that is more than an amount by which the pilot channel transmit power level is increased (the increased total transmission power of the mobile station can be either equal or different than the increased transmission power of the pilot channel; only the pilot channel is transmitted and the traffic channel is not transmitted [col. 4 lines 40-67]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to decreasing a power gain of other channels while increasing the power of the reverse pilot signal as taught by Moon in the method of Chheda et al., as modified by Nanda et al., in order to implement power control during a soft handoff.

Consider **claim 33**, Chheda et al. clearly show and disclose an apparatus comprising: means for detecting an unbalanced quality of power control signals from a wireless device simultaneously received at a plurality of base station transceivers involved in a soft handover, wherein the unbalanced quality is determined based on qualities of power control signals from each of the plurality of base station transceivers involved in the soft handoff (BTS sending forward link signals to MS and receiving power control channel signals; each of the BTSs sends the bit energy to noise density estimate and current transmit power to a central location such as BSC; if any output powers incremental difference are found to exceed a predetermined threshold, these BTSs are instructed to use power output of the BTS(x) (the best) [col. 1 lines 15-28, col. 2 lines 37-53, col. 4 line 60- col. 5 line 33]).

However, Chheda et al. fail to specifically disclose that the SNR of a pilot channel is increased.

In the same field of endeavor, Nanda et al. clearly show and disclose increasing a target signal-to-noise ratio (SNR) of a reverse link pilot channel carrying at least one of the power control signals for at least one of the plurality of base station transceivers when the quality of the at least one of the power control signals for the at least one of the plurality of base station transceivers is below a predefined target signal quality (If effective $E_{sub.b}/N_{sub.0}$ is smaller than model targeted $E_{sub.b}/N_{sub.0}$, targeted $E_{sub.b}/N_{sub.0}$ is increased by one up step size; When $pcg E_{sub.b}/N_{sub.0} 490$ is smaller than targeted $E_{sub.b}/N_{sub.0}$, mobile terminal sends a power-control bit on reverse link indicating that base station should increase the power of forward link [fig. 4, col. 8 line 35- col. 9 line 15]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to increase the energy to noise density based on the measured signal from the base station as taught by Nanda et al. in the method of Chheda et al., in order to implement power control during a soft handoff.

However, Chheda et al., as modified by Nanda et al., fail to increase the transmit power level of the pilot channel from the wireless device decrease a power gain of other channels.

In the same field of endeavor, Moon clearly shows and discloses means for increasing a pilot channel transmit power level of the pilot channel transmitted by the wireless device during a handoff in response to the at least one of the plurality of base

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station transceivers (mobile station increases transmission power [fig. 2, col. 3 lines 46-65, col. 6 lines 6-14]); and means for decreasing a power gain of other channels transmitted by the wireless device in relation to the increased transmit power level of the pilot channel of the wireless device during the handoff (total transmission power is not changed; with some traffic channels decreasing transmission power [fig. 2, col. 3 lines 46-65, col. 6 lines 6-14]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to decreasing a power gain of other channels while increasing the power of the reverse pilot signal as taught by Moon in the method of Chheda et al., as modified by Nanda et al., in order to implement power control during a soft handoff.

Consider **claim 34**, the combination of Chheda et al. and Nanda et al., as modified by Moon, clearly shows and discloses the claimed invention **as applied to claim 33 above**, and in addition, Moon further discloses the power gain of other channels in relation to the pilot channel is decreased by an amount that is equal to an amount by which the pilot channel transmit power level is increased (the mobile station increases transmission power of the pilot channel by ΔP ; it is also possible to assign the total transmission power of the mobile station to the pilot channel [col. 3 lines 46-65]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to decreasing a power gain of other channels while increasing the power of the reverse pilot signal as taught by Moon in the method of

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Chheda et al., as modified by Nanda et al., in order to implement power control during a soft handoff.

Consider **claim 35**, the combination of Chheda et al. and Nanda et al., as modified by Moon, clearly shows and discloses the claimed invention **as applied to claim 33 above**, and in addition, Moon further discloses the power gain of other channels in relation to the pilot channel is decreased by an amount that is more than an amount by which the pilot channel transmit power level is increased (the increased total transmission power of the mobile station can be either equal or different than the increased transmission power of the pilot channel; only the pilot channel is transmitted and the traffic channel is not transmitted [col. 4 lines 40-67]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to decreasing a power gain of other channels while increasing the power of the reverse pilot signal as taught by Moon in the method of Chheda et al., as modified by Nanda et al., in order to implement power control during a soft handoff.

Consider **claim 37**, Chheda et al. clearly show and disclose a computer readable media embodying a method, comprising: detecting an unbalanced quality of power control signals from a wireless device simultaneously received at a plurality of base station transceivers involved in a soft handover, wherein the unbalanced quality is determined based on qualities of power control signals from each of the plurality of base station transceivers involved in the soft handoff (BTS sending forward link signals to MS and receiving power control channel signals; each of the BTSs sends the bit energy to

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noise density estimate and current transmit power to a central location such as BSC; if any output powers incremental difference are found to exceed a predetermined threshold, these BTSs are instructed to use power output of the BTS(x) (the best) [fig. 1, col. 1 lines 15-28, col. 2 lines 37-53, col. 4 line 60- col. 5 line 33] wherein since the method is implemented using decision blocks, it is obvious that a media embodying the method is present).

However, Chheda et al. fail to specifically disclose that the SNR of a pilot channel is increased.

In the same field of endeavor, Nanda et al. clearly show and disclose increasing a target signal-to-noise ratio (SNR) of a pilot channel carrying at least one of the power control signals for at least one of the plurality of base station transceivers when the quality of the at least one of the power control signals for the at least one of the plurality of base station transceivers is below a predefined target signal quality (If effective $E_{sub.b}/N_{sub.0}$ is smaller than model targeted $E_{sub.b}/N_{sub.0}$, targeted $E_{sub.b}/N_{sub.0}$ is increased by one up step size; When $pcg E_{sub.b}/N_{sub.0}$ 490 is smaller than targeted $E_{sub.b}/N_{sub.0}$, mobile terminal sends a power-control bit on reverse link indicating that base station should increase the power of forward link [fig. 4, col. 8 line 35- col. 9 line 15]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to increase the energy to noise density based on the measured signal from the base station as taught by Nanda et al. in the method of Chheda et al., in order to implement power control during a soft handoff.

However, Chheda et al., as modified by Nanda et al., fail to increase the transmit power level of the pilot channel from the wireless device decrease a power gain of other channels.

In the same field of endeavor, Moon clearly shows and discloses increasing a pilot channel transmit power level of the pilot channel transmitted by the wireless device during a handoff in response to the at least one of the plurality of base station transceivers (mobile station increases transmission power [fig. 2, col. 3 lines 46-65, col. 6 lines 6-14]); and decreasing a power gain of other channels transmitted by the wireless device in relation to the increased transmit power level of the pilot channel of the wireless device during the handoff (total transmission power is not changed; with some traffic channels decreasing transmission power [fig. 2, col. 3 lines 46-65, col. 6 lines 6-14]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to decreasing a power gain of other channels while increasing the power of the reverse pilot signal as taught by Moon in the method of Chheda et al., as modified by Nanda et al., in order to implement power control during a soft handoff.

Consider **claim 38**, the combination of Chheda et al. and Nanda et al., as modified by Moon, clearly shows and discloses the claimed invention **as applied to claim 37 above**, and in addition, Moon further discloses the power gain of other channels in relation to the pilot channel is decreased by an amount that is equal to an amount by which the pilot channel transmit power level is increased (the mobile station

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increases transmission power of the pilot channel by ΔP ; it is also possible to assign the total transmission power of the mobile station to the pilot channel [col. 3 lines 46-65]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to decreasing a power gain of other channels while increasing the power of the reverse pilot signal as taught by Moon in the method of Chheda et al., as modified by Nanda et al., in order to implement power control during a soft handoff.

Consider **claim 39**, the combination of Chheda et al. and Nanda et al., as modified by Moon, clearly shows and discloses the claimed invention **as applied to claim 37 above**, and in addition, Moon further discloses the power gain of other channels in relation to the pilot channel is decreased by an amount that is more than an amount by which the pilot channel transmit power level is increased (the increased total transmission power of the mobile station can be either equal or different than the increased transmission power of the pilot channel; only the pilot channel is transmitted and the traffic channel is not transmitted [col. 4 lines 40-67]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to decreasing a power gain of other channels while increasing the power of the reverse pilot signal as taught by Moon in the method of Chheda et al., as modified by Nanda et al., in order to implement power control during a soft handoff.

6. **Claim 41** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Chheda et al. (US 6,515,975 B1)** in view of **Nanda et al. (US 6,571,104 B1)**.

Consider **claim 41**, Chheda et al. clearly show and disclose a method, comprising: receiving a first forward link power control signal from a wireless device by a first base station transceiver involved in a soft handoff, wherein the first forward link power control signal is communicated over a first reverse link power control sub-channel of a first reverse link from the wireless device to the first base station transceiver (BTS sending forward link signals to MS and receiving power control channel signals; each of the BTSs sends the bit energy to noise density estimate and current transmit power to a central location such as BSC; if any output powers incremental difference are found to exceed a predetermined threshold, these BTSs are instructed to use power output of the BTS(x) (the best) [col. 1 lines 15-28, col. 2 lines 37-53, col. 4 line 60- col. 5 line 33]); receiving a second forward link power control signal from the wireless device by a second base station transceiver involved in the soft handoff, wherein the second forward link power control signal is communicated over a second reverse link power control sub-channel of a second reverse link from the wireless device to the second base station transceiver, wherein the first and second forward link power control signals are transmitted by the wireless device simultaneously (BTS sending forward link signals to MS and receiving power control channel signals; each of the BTSs sends the bit energy to noise density estimate and current transmit power to a central location such as BSC; if any output powers incremental difference are found to exceed a predetermined threshold, these BTSs are instructed to use power

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output of the BTS(x) (the best) [fig. 1, col. 1 lines 15-28, col. 2 lines 37-53, col. 4 line 60- col. 5 line 33]).

However, Chheda et al. fail to specifically disclose that the SNR of a pilot channel is increased.

In the same field of endeavor, Nanda et al. clearly show and disclose increasing a target signal-to-noise ratio (SNR) of the first reverse link power control sub-channel when the detected quality of the first forward link power control signal is below a predefined target signal quality (If effective $E_{sub.b}/N_{sub.0}$ is smaller than model targeted $E_{sub.b}/N_{sub.0}$, targeted $E_{sub.b}/N_{sub.0}$ is increased by one up step size; When $pcg E_{sub.b}/N_{sub.0}$ 490 is smaller than targeted $E_{sub.b}/N_{sub.0}$, mobile terminal sends a power-control bit on reverse link indicating that base station should increase the power of forward link [fig. 4, col. 8 line 35- col. 9 line 15]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to increase the energy to noise density based on the measured signal from the base station as taught by Nanda et al. in the method of Chheda et al., in order to implement power control during a soft handoff.

7. **Claim 42** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Chheda et al. (US 6,515,975 B1)** in view of **Nanda et al. (US 6,571,104 B1)**, and in further view of **Stellakis (US 6,545,986 B1)**.

Consider **claim 42**, and **as applied to claim 41 above**, Chheda et al., as modified by Nanda et al., clearly show and disclose the claimed invention except decreasing a target frame error rate associated with the first reverse link.

In the same field of endeavor, Stellakis clearly shows and discloses wherein the target signal-to-noise ratio of the first reverse link power control sub-channel is increased by decreasing a target frame error rate associated with the first reverse link (A high FER may be decreased by increasing the transmission power level [col. 4 lines 45-65]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to decrease the FER by increasing the transmission power as taught by Stellakis in the method of Chheda et al., as modified by Nanda et al., in order to implement power control during a soft handoff.

8. **Claims 43 and 44** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Chheda et al. (US 6,515,975 B1)** in view of **Nanda et al. (US 6,571,104 B1)**, and in further view of **Jalali et al. (6,154,659)**.

Consider **claim 43**, and **as applied to claim 41 above**, Chheda et al., as modified by Nanda et al., clearly show and disclose the claimed invention except the target signal-to-noise ratio of the first reverse link power control sub-channel is increased without changing a target frame error rate.

In the same field of endeavor, Jalali et al. clearly show and disclose wherein the target signal-to-noise ratio of the first reverse link power control sub-channel is

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increased without changing a target frame error rate associated with the first reverse link (target E_s/N_o is adjusted on a frame by frame basis. The target is modified in such a way as to maintain the required frame error rate [col. 6 lines 30-40]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to adjust the energy to noise density to maintain a target frame error rate as taught by Jalali et al. in the method of Chheda et al., as modified by Nanda et al., in order to implement power control during a soft handoff.

Consider **claim 44**, and **as applied to claim 41 above**, Chheda et al., as modified by Nanda et al., clearly show and disclose the claimed invention target signal-to-noise ratio of the first reverse link power control sub-channel is increased based on a bit error rate.

In the same field of endeavor, Jalali et al. clearly show and disclose wherein the target signal-to-noise ratio of the first reverse link power control sub-channel is increased based on a bit error rate of the first forward link power control signal (reverse link frame error rate provides an indication of the fast forward link power control bit error rate for that particular base station [col. 11 lines 29-40]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made monitor the frame error rate which indicates the bit error rate to adjust the energy to noise density as taught by Jalali et al. in the method of Chheda et al., as modified by Nanda et al., in order to implement power control during a soft handoff.

9. **Claims 45-47** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Chheda et al. (US 6,515,975 B1)** in view of **Nanda et al. (US 6,571,104 B1)**, and in further view of **Moon (US 6,567,391 B1)**.

Consider **claim 45**, Chheda et al., as modified by Nanda et al., clearly show and disclose the claimed invention **as applied to claim 41 above**, and in addition, Chheda et al. further disclose detecting an unbalanced quality of the first and second forward link power control signals (each of the BTSs sends the bit energy to noise density estimate and current transmit power to a central location such as BSC; if any output powers incremental difference are found to exceed a predetermined threshold, these BTSs are instructed to use power output of the BTS(x) (the best) [col. 1 lines 15-28, col. 2 lines 37-53, col. 4 line 60- col. 5 line 33]).

However, Chheda et al., as modified by Nanda et al., fail to specifically disclose increasing the transmit power level of the pilot channel from the wireless device, and decreasing a power gain of other channels.

In the same field of endeavor, Moon clearly shows and discloses increasing a transmit power level of the first reverse link power control sub-channel in response to a command from the first base station transceiver to the wireless device (mobile station increases transmission power [fig. 2, col. 3 lines 46-65, col. 6 lines 6-14]); and decreasing a power gain of other channels transmitted by the wireless device in relation to the increased transmit power level of the first reverse link power control sub-channel (total transmission power is not changed; with some traffic channels decreasing transmission power [fig. 2, col. 3 lines 46-65, col. 6 lines 6-14]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to decreasing a power gain of other channels while increasing the power of the reverse pilot signal as taught by Moon in the method of Chheda et al., as modified by Nanda et al., in order to implement power control during a soft handoff.

Consider **claim 46**, the combination of Chheda et al. and Nanda et al., as modified by Moon, clearly shows and discloses the claimed invention **as applied to claim 45 above**, and in addition, Moon further discloses herein the power gain of other channels in relation to the first reverse link power control sub-channel is decreased by an amount that is equal to an amount by which the first reverse link power control sub-channel transmit power level is increased (the mobile station increases transmission power of the pilot channel by ΔP ; it is also possible to assign the total transmission power of the mobile station to the pilot channel [col. 3 lines 46-65]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to decreasing a power gain of other channels while increasing the power of the reverse pilot signal as taught by Moon in the method of Chheda et al., as modified by Nanda et al., in order to implement power control during a soft handoff.

Consider **claim 47**, the combination of Chheda et al. and Nanda et al., as modified by Moon, clearly shows and discloses the claimed invention **as applied to claim 45 above**, and in addition, Moon further discloses wherein the power gain of other channels in relation to the first reverse link power control sub-channel is

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decreased by an amount that is more than an amount by which the first reverse link power control sub-channel transmit power level is increased (the increased total transmission power of the mobile station can be either equal or different than the increased transmission power of the pilot channel; only the pilot channel is transmitted and the traffic channel is not transmitted [col. 4 lines 40-67]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to decreasing a power gain of other channels while increasing the power of the reverse pilot signal as taught by Moon in the method of Chheda et al., as modified by Nanda et al., in order to implement power control during a soft handoff.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAIME M. HOLLIDAY whose telephone number is (571)272-8618. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/Jaime M Holliday/
Examiner, Art Unit 2617